BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

DIVISION: BYATARAYANAPURA

SUB DIVISION: VIDYARANYAPURA

*Name of Work: **Modified Estimate for Improvements of Roads and Drains at HMT Layout, Thindlu, Virupakshapura and surrounding area in Ward No. 09 (Vidyaranyapura).***

Job Code: 009-21-000005

Estimated Cost Rs:	***100.00 Lakhs***
Modified Cost Rs:	***92.86 Lakhs***

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of the work: **Modified Estimate for Improvements of Roads and Drains at HMT Layout, Thindlu, Virupakshapura and surrounding area in Ward No. 09 (Vidyaranyapura).**

								Estimate Cost:	9286077.00
Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **Page No. 143 / Item No. 19.1, PWD SR 2018-19**	Cum							
	Desilting of Drain								
	HMT Layout 4th Block 15th Cross Road		2	215.00	0.45	0.45	87.08		
	HMT Layout 4th Block 14th Cross Road		2	148.00	0.45	0.45	59.94		
	HMT Layout 4th Block 5th Cross Road		2	93.00	0.45	0.40	33.48		
	Berm Cutting								
	HMT Layout 4th Block 15th Cross Road		2	215.00	1.00	0.20	86.00		
	HMT Layout 4th Block 14th Cross Road		2	148.00	0.90	0.20	53.28		
	HMT Layout 4th Block 5th Cross Road		2	93.00	1.00	0.20	37.20		
	RCC Drain								
	HMT 5th Block, 6th Main Road E/S		1.00	141.00	1.00	1.00	141.00		
			1.00	142.00	1.00	1.00	142.00		
	HMT 5th Block, 6th Main Road W/S		1.00	152.00	1.00	1.00	152.00		
			1.00	36.90	1.00	1.00	36.90		
			1.00	75.00	1.00	1.00	75.00		
	HMT 4th Block, 15th Cross Road N/S		1.00	32.10	1.00	1.00	32.10		
	HMT 4th Block, 15th Cross Road S/S		1.00	97.10	1.00	1.00	97.10		
	Cross Road E/S		1.00	46.00	1.00	1.00	46.00		
	Cross Road W/S		1.00	16.00	1.00	1.00	16.00		
	HMT 4th Block, 4th Main Road E/S		1.00	37.70	1.00	1.00	37.70		
							1132.78	300.00	**339833.00**
2	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6 with with OPC cement @ 220kgs, with crushed 40mm** and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @ 0.56cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days complete as per specifications MORTH Specification No. 2100 **Item No. 27.18 Page No. 222, PWD SR 2018-19**	cum							
	HMT 5th Block, 6th Main Road E/S		1.00	141.00	1.00	0.15	21.15		
			1.00	142.00	1.00	0.15	21.30		
	HMT 5th Block, 6th Main Road W/S		1.00	152.00	1.00	0.15	22.80		
			1.00	36.90	1.00	0.15	5.54		
			1.00	75.00	1.00	0.15	11.25		
	HMT 4th Block, 15th Cross Road N/S		1.00	32.10	1.00	0.15	4.82		
	HMT 4th Block, 15th Cross Road S/S		1.00	97.10	1.00	0.15	14.57		
	Cross Road E/S		1.00	46.00	1.00	0.15	6.90		
	Cross Road W/S		1.00	16.00	1.00	0.15	2.40		
	HMT 4th Block, 4th Main Road E/S		1.00	37.70	1.00	0.15	5.66		
							116.37	5500.00	**640035.00**
3	Providing and constructing granite / trap / basalt size stone masonry in **basement with cement mortar 1:6, edges of stones** chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. **Page No. 255, Item No. 34.9, PWD SR 2018-19**	cum							
			Not Executed				0.00		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
							0.00	5811.00	**0.00**
4	Providing and laying in position **plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size** graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page. No. 255 / Item No.34.11 of PWD SR 2018-19**	cum							
	Coping		Not Executed				0.00		
							0.00	5599.00	**0.00**
5	Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. – do – cement mortar 1:4 **Page. No. 255 / Item No.34.12.1 of PWD SR 2018-19**	sqm							
	Pointing		Not Executed				0.00		
							0.00	149.00	**0.00**
6	Providing laying palin / reinforced cement concrete for side drains using M 20 nominal mix concrete with OPC at 300 kgs with 20 mm and down size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed well compacted for walls and bottom including cenmtering shuttering form work etc. complete as per approved drawing and design MORTH Specification No. 1500,1700,2200 Wall & Bottom thickness 15cm **Page No. 271, Item No. 37.59.2, PWD SR 2018-19**	Cum							
	Bottom Concrete								
	HMT 5th Block, 6th Main Road E/S		1.00	141.00	0.90	0.15	19.04		
			1.00	142.00	0.90	0.15	19.17		
	HMT 5th Block, 6th Main Road W/S		1.00	152.00	0.90	0.15	20.52		
			1.00	36.90	0.90	0.15	4.98		
	HMT 4th Block, 15th Cross Road N/S		1.00	75.00	0.90	0.15	10.13		
	HMT 4th Block, 15th Cross Road S/S		1.00	32.10	0.90	0.15	4.33		
	Cross Road E/S		1.00	97.10	0.90	0.15	13.11		
	Cross Road W/S		1.00	46.00	0.90	0.15	6.21		
	HMT 4th Block, 4th Main Road E/S		1.00	16.00	0.90	0.15	2.16		
	Side Wall		1.00	37.70	0.90	0.15	5.09		
	HMT 5th Block, 6th Main Road E/S		2.00	141.00	0.15	0.75	31.73		
			2.00	142.00	0.15	0.75	31.95		
	HMT 5th Block, 6th Main Road W/S		2.00	152.00	0.15	0.75	34.20		
			2.00	36.90	0.15	0.75	8.30		
	HMT 4th Block, 15th Cross Road N/S		2.00	75.00	0.15	0.75	16.88		
	HMT 4th Block, 15th Cross Road S/S		2.00	32.10	0.15	0.75	7.22		
	Cross Road E/S		2.00	97.10	0.15	0.75	21.85		
	Cross Road W/S		2.00	46.00	0.15	0.75	10.35		
	HMT 4th Block, 4th Main Road E/S		2.00	16.00	0.15	0.75	3.60		
			2.00	37.70	0.15	0.75	8.48		
	Total Qty						**279.29**		
	Qty upto 125%						**257.51**	7200.00	**1854090.00**
	Qty Above 125%						**21.78**	7417.35	**161516.00**
	Basic Rate	6670.00							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Area Weightage @ 6%	400.20							
	Total	**7070.20**							
	Tender Premium @ 4.91% above	347.15							
	Grand Total	**7417.35**							
7	Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. **TMT bars Fe 500 Page No. 229 / Item No. 28.8.2, PWD SR 2018-19**	Tonne							
	For RCC Drain @ 60 Kg / Cum		0.06	279.29			**16.76**		
	Qty upto 125%						**15.45**	72326.00	**1117437.00**
	Qty Above 125%						**1.31**	75878.23	**99194.00**
	Basic Rate	68233.00							
	Area Weightage @ 6%	4093.98							
	Total	**72326.98**							
	Tender Premium @ 4.91% above	3551.25							
	Grand Total	**75878.23**							
8	Providing **precast slab of 100mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge - Data rate	Sqm							
	HMT 5th Block, 6th Main Road E/S		1.00	89.50	0.90		80.55		
			1.00	59.80	0.90		53.82		
	HMT 5th Block, 6th Main Road W/S		1.00	30.00	0.90		27.00		
			1.00	18.90	0.90		17.01		
	15th Cross N/S		1.00	22.90	0.90		20.61		
	15th Cross S/S		1.00	50.00	0.90		45.00		
			1.00	18.40	0.90		16.56		
			1.00	28.50	0.90		25.65		
			1.00	16.00	0.90		14.40		
	4th Main Road		1.00	28.30	0.90		25.47		
							326.07	2337.00	**762026.00**
9	Providing **precast slab of 250mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc.,complete as per the direction of engineer in charge - Data rate	Sqm							
				Not Executed			0.00		
							0.00	5418.00	**0.00**
10	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete **Page No. 27 / Item No. 5.30 PWD SR 2018-19**	No							
	HMT 5th Block, 6th Main Road E/S		1.00	141.00			141.00		
			1.00	142.00			142.00		
	HMT 5th Block, 6th Main Road W/S		1.00	152.00			152.00		
			1.00	36.90			36.90		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
			1.00	75.00			75.00		
	HMT 4th Block, 15th Cross Road N/S		1.00	32.10			32.10		
	HMT 4th Block, 15th Cross Road S/S		1.00	97.10			97.10		
	Cross Road E/S		1.00	46.00			46.00		
	Cross Road W/S		1.00	16.00			16.00		
	HMT 4th Block, 4th Main Road E/S		1.00	37.70			37.70		
							775.80		
	Divide			0.45			**1724.00**		
							1724	432.00	**744768.00**
11	KSRB 15-19.1 : Providing and applying ready mix priming coat **over concrete** / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications. **Page No. 124 / Item No. Item No. 15.80, PWD SR 2018-19**	Sqm							
	HMT 5th Block, 6th Main Road E/S		1.00	141.00		0.40	56.40		
			1.00	142.00		0.40	56.80		
	HMT 5th Block, 6th Main Road W/S		1.00	152.00		0.40	60.80		
			1.00	36.90		0.40	14.76		
			1.00	75.00		0.40	30.00		
	HMT 4th Block, 15th Cross Road N/S		1.00	32.10		0.40	12.84		
	HMT 4th Block, 15th Cross Road S/S		1.00	97.10		0.40	38.84		
	Cross Road E/S		1.00	46.00		0.40	18.40		
	Cross Road W/S		1.00	16.00		0.40	6.40		
	HMT 4th Block, 4th Main Road E/S		1.00	37.70		0.40	15.08		
							310.32	39.00	**12102.00**
12	KSRB 15-19.2 : Providing and applying spray painting in two coats (excluding priming coat) over concrete / masonry / asbestos cement sheet / plastered surfaces with flat wall paint of approved brand to give even shade after cleaning the surface of all dirt, dust and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.**Page No. 124 / Item No. Item No. 15.81, PWD SR 2018-19**	Sqm							
			Qty Vide Item No. 11				**310.32**	90.00	**27929.00**
13	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **Page No. 146 / Item No. 19.55 PWD SR 2018-19**	Sqm							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60		1204.00		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00		888.00		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00		558.00		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60		823.20		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60		952.00		
			1	60.00	5.50		330.00		
							4755.20		
	Consider 35% of the Total Qty						**1664.32**	95.00	**158110.00**

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
14	KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **Page No. 155 / Item No. 20.18, PWD SR 2018-19**	Cum							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60	0.25	301.00		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00	0.25	222.00		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00	0.25	139.50		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60	0.25	205.80		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60	0.25	238.00		
			1	60.00	5.50	0.25	82.50		
							1188.80		
	Consider 35% of the Total Qty						**416.08**	2001.00	**832576.00**
15	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 **Page No. 158 / Item No. 21.6, PWD SR 2018-19**	Sqm							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60		1204.00		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00		888.00		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00		558.00		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60		823.20		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60		952.00		
			1	60.00	5.50		330.00		
							4755.20		
	Consider 35% of the Total Qty						**1664.32**	29.00	**48265.00**
16	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen **Page No. 160 / Item No. 21.17.6, PWD SR 2018-19**	Cum							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60	0.05	60.20		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00	0.05	44.40		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00	0.05	27.90		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60	0.05	41.16		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60	0.05	47.60		
			1	75.00	5.50	0.05	20.63		
							241.89		
	Consider 35% of the Total Qty						**84.66**	7000.00	**592618.00**

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
17	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 **Page No. 158 / Item No. 21.2, PWD SR 2018-19**	Sqm							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60		1204.00		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00		888.00		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00		558.00		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60		823.20		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60		952.00		
			1	60.00	5.50		330.00		
							4755.20	6.75	**32098.00**
18	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 **Page No. 158 / Item No. 21.7 PWD SR 2018-19**	Sqm							
			Qty Vide Item No. 17				4755.20		
							4755.20	12.00	**57062.00**
19	KSRRB M500-19. Providing and laying **bituminous concrete 40 mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - **using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen Page No. 162 / Item No. 21.22.6, PWD SR 2018-19**	Cum							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60	0.04	48.16		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00	0.04	35.52		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00	0.04	22.32		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60	0.04	32.93		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60	0.04	38.08		
			1	60.00	5.50	0.04	13.20		
							190.21	9000.00	**1711872.00**
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 **Page No. 182, Item No. 24.15 PWD SR 2018-19**	Sqm							
	Centre Line								
	HMT Layout 4th Block 15th Cross Road		0.5	215.00	0.10		10.75		
	HMT Layout 4th Block 14th Cross Road		0.5	148.00	0.10		7.40		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	HMT Layout 4th Block 5th Cross Road		0.5	93.00	0.10		4.65		
	HMT Layout 4th Block 6th Cross Road		0.5	147.00	0.10		7.35		
	HMT Layout 5th Block 6th Cross Road		0.5	170.00	0.10		8.50		
			0.5	60.00	0.10		3.00		
	Sides								
	HMT Layout 4th Block 15th Cross Road		2	215.00	0.10		43.00		
	HMT Layout 4th Block 14th Cross Road		2	148.00	0.10		29.60		
	HMT Layout 4th Block 5th Cross Road		2	93.00	0.10		18.60		
	HMT Layout 4th Block 6th Cross Road		2	147.00	0.10		29.40		
	HMT Layout 5th Block 6th Cross Road		2	170.00	0.10		34.00		
			2	60.00	0.10		12.00		
							208.25	454.00	**94546.00**
	Total								**9286077.00**
	Rupees Ninety Two Lakh(s) Eighty Six Thousand Seventy Seven Only								

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19 +/- Tender Premium.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Technical Sanction
Accorded For Rs 9286077.00
Head of A/C P.3798
CER NO :.....93..... Dt:25.03.2021

TA CE (YNK)

152 - BYATARAYANAPURA AC
WARD NAME : 9 - VIDYARANYAPURA